# Notice No. 5

## Rules and Regulations for the Classification of Special Service Craft, July 2014

The status of this Rule set is amended as shown and is now to be read in conjunction with this and prior Notices. Any corrigenda included in the Notice are effective immediately.

## Issue date: April 2015

Amendments to	Effective date
Part 1, Chapter 2, Sections 1, 2, 3 & 4	1 July 2015
Part 1, Chapter 3, Sections 1, 2, 4, 5, 6 & 7	1 July 2015
Part 1, Chapter 4, Sections 1, 2, 3, 4 & 6	1 July 2015
Part 3, Chapter 1, Sections 5, 6 & 7	1 July 2015
Part 3, Chapter 2, Section 4	1 July 2015
Part 3, Chapter 3, Sections 2 & 3	1 July 2015
Part 3, Chapter 4, Sections 4 & 7	1 July 2015
Part 4, Chapter 1, Section 1	1 July 2015
Part 4, Chapter 2, Sections 1, 4, 6 & 7	1 July 2015
Part 4, Chapter 3, Sections 1 & 3	1 July 2015
Part 5, Chapter 1, Section 1	1 July 2015
Part 6, Chapter 2, Sections 2 & 3	1 July 2015
Part 6, Chapter 3, Sections 1 & 2	1 July 2015
Part 6, Chapter 4, Sections 1 & 2	1 July 2015
Part 6, Chapter 5, Sections 1, 3 & 4	1 July 2015
Part 6, Chapter 6, Section 1	1 July 2015
Part 7, Chapter 2, Sections 2 & 3	1 July 2015



# Notice No. 5 Continued

Issue date: April 2015

Amendments to	Effective date
Part 15, Chapter 4, Section 2	1 July 2015
Part 17, Chapter 1, Section 1	1 July 2015
Part 17, Chapter 3, Section 3	1 July 2015



### **Classification Regulations**

#### Effective date 1 July 2015

### Section 1

### Conditions for classification

#### 1.1 General

- 1.1.13 Yachts with a load line length, of 24m 24 m and over, having a service type notation of Yacht, will be assigned class only after it has been demonstrated that the stability of the yacht complies with the stability requirements of the National Administration, provided these are as a minimum equivalent to the intact stability requirements of the UK MCA LY23 Code (as amended).
- 1.1.14 Yachts with a load line length of 24 m and above, and with a gross tonnage of less than 3000, will be assigned a service type notation **Yacht(S)** only after it has been demonstrated that both the intact and damage stability comply with the UK MCA LY23 Code as amended.
- 1.1.15 Yachts with a load line length of 24 m and above, and with a gross tonnage of 3000 and above, will be assigned a service type notation Yacht(S) only after it has been demonstrated that both the intact and damage stability comply with enhanced stability requirements such as a recognised International Standard.

### ■ Section 2

### Scope of the Rules

### 2.2 Definitions

2.2.10 **Laid-up notation**. A craft not under repair or not actively employed may be assigned the **Laid-up** notation in order to maintain the ship in class subject to agreement by the Classification Committee. A general examination of the hull and machinery is to be carried out in lieu of the Annual Survey/Intermediate Survey. A general examination of the hull and machinery and an Underwater Examination (UWE) is to be carried out in lieu of the Special Survey, see 2.1.3, 5.1.4 and 7.1.3.

Existing paragraphs 2.2.10 to 2.2.25 have been renumbered 2.2.11 to 2.2.26.

2.2.2.7 ShipRight notation. A notation indicating that one or more of LR's ShipRight procedures have been satisfactorily followed. Class notations or descriptive notes will be assigned according to whether the ShipRight procedures are applied on a mandatory or voluntary basis.

Existing paragraphs 2.2.26 to 2.2.29 have been renumbered 2.2.28 to 2.2.31.

2.2.32 **Wind Farm Service Vessel**. A Wind Farm Service Vessel is a craft designed for duties specific to the maintenance and support of offshore wind farms.

Existing paragraph 2.2.30 has been renumbered 2.2.33.

### ■ Section 3

### Character of classification and class notations

### 3.6 Service type notations

(Part only shown)

3.6.2 A list of service type notations for which craft may be eligible is given below:

#### Wind Farm Service Vessel

This notation will be assigned to Wind Farm Service Vessels that comply with the relevant requirements for workboats and which take into account specific Wind Farm Service applications that they may be required to undertake, see LR's Guidance Notes for the Classification of Wind Farm Service Vessels.

Workboat This notation will be assigned to workboats complying with the relevant requirements of the Rules.

#### 3.8 Other hull notations

- 3.8.1 Ice eClass notation. A class notation for navigation in first-year ice conditions will be specially considered.
- 3.8.6 **ShipRight ACS (B)**. The ShipRight Anti-Corrosion System notation **ShipRight ACS (B)** will be assigned when protective coating system of water ballast tanks has been applied in accordance with the ShipRight Procedure *Anti-Corrosion System Notation*.
- Section 4

Surveys - General

### 4.5 Existing service craft and yachts – Periodical Surveys

4.5.28 Where the Committee has agreed to an Owner's request to assign the Laid-up notation 'laid-up', the vessel may be retained in class provided a satisfactory general examination of the hull and machinery is carried out at the Annual Survey/Intermediate Survey due date and in addition an Underwater Examination (UWE) is carried out at the Special Survey due date. The general examination may be carried out within three months before or after the Annual Survey due date.

### Part 1, Chapter 3

### **Periodical Survey Regulations for Service Craft**

Effective date 1 July 2015

■ Section 1

General

### 1.1 Frequency of surveys

1.1.2 For vessels assigned the **Laid-up** notation 'laid-up', in order to maintain the vessel in class a general examination of the hull and machinery is to be carried out in lieu of the Annual Survey/Intermediate Survey and in addition an Underwater Examination (UWE) is to be carried out in lieu of the Special Survey, see 2.1.3, 5.1.4 and 7.1.3.

### 1.5 Definitions

- 1.5.2 **Spaces** are separate hull compartments including integral tanks such as holds, tanks, cofferdams and void spaces bounding cargo holds, decks and the outer hull.
- 1.5.3 **Enclosed space**. An enclosed space is any place of an enclosed nature where there is a risk of death or serious injury from hazardous substances or dangerous conditions. Examples include, but are not limited to: boilers, pressure vessels, cargo spaces (cargo holds or cargo tanks), cargo space stairways, ballast tanks, double bottoms, double hull spaces, fuel oil tanks, lube oil tanks, sewage-tanks, pump-rooms, compressor rooms, cofferdams, void spaces, duct keels, inter-barrier spaces, engine crankcases, excavations and pits.

Existing paragraphs 1.5.3 to 1.5.8 have been renumbered 1.5.4 to 1.5.9.

### 1.7 Preparation for survey and means of access

1.7.1 In order to enable the attending Surveyor(s) to carry out the survey, provisions for proper and safe access are to be agreed between the Owner and LR. Tanks and spaces are to be safe for access, be gas free and properly ventilated. Prior to entering a tank, void or enclosed space, it is to be verified that the atmosphere in that space is free from hazardous gas and contains sufficient oxygen.

- 1.7.2 In preparation for survey, thickness measurements and to allow for a thorough examination, all spaces are to be cleaned including removal from surfaces of all loose accumulated corrosion scale. Spaces are to be sufficiently clean and free from water, scale, dirt, oil residues, etc., to reveal corrosion, deformation, fractures, damages or other structural deterioration, as well as the condition of the protective coating. However, those areas of structure whose renewal has already been decided by the Owner need only be cleaned and descaled to the extent necessary to determine the limits of renewed areas.
- 1.7.3 Sufficient illumination is to be provided to reveal corresion, deformation, fractures, damages or other structural deterioration.
- 1.7.4 Means are to be provided to enable the Surveyor to examine the structure in a safe and practical way. Where the provisions of safety and required access are determined by the Surveyor not to be adequate, the survey of the space(s) involved is not to proceed.
- 1.7.5 Where soft or semi-hard coatings have been applied, safe access is to be provided for the Surveyor to verify the effectiveness of the coating and to carry out an assessment of the conditions of internal structures which may include spot removal of the coating. When safe access cannot be provided, the soft or semi-hard coating is to be removed.
- 1.7.6 A calibrated multi-gas meter, lifeline and riding belts with rope, hook and whistles, together with instructions and guidelines on their use, are to be made available during the survey of any confined space. Breathing apparatus is to be made available but is only to be used in case of an emergency or rescue operation. A safety checklist is also to be provided.
- 1.7.1 In order to enable the attending Surveyor(s) to carry out surveys, provisions for safe access and for surveys are to be agreed between the Owner and LR. Attention is drawn to the applicable recommendations in the IACS PR37 and/or IMO Recommendations For Entering Enclosed Spaces Aboard Ships, Resolution A.1050(27).
- 1.7.2 Means are to be provided to enable the Surveyor to examine the structure in a safe and practical way. Where the provisions of safety and required access are determined by the Surveyor not to be adequate, then the survey of the space(s) involved is not to proceed.
- 1.7.3 Spaces are to be made safe for access and surveys and are to be sufficiently cleaned, illuminated and ventilated.
- 1.7.4 In preparation for surveys, thickness measurements and to allow for a thorough examination, cleaning is to include removal from surfaces of all loose accumulated corrosion scale. Spaces are to be sufficiently clean and free from water, scale, dirt, oil residues, etc., to reveal corrosion, deformation, fractures, damages or other structural deterioration, as well as the condition of the protective coating. However, those areas of structure whose renewal has already been decided by the Owner need only be cleaned and descaled to the extent necessary to determine the limits of renewed areas.
- 1.7.5 Where soft or semi-hard coatings have been applied, safe access is to be provided for the Surveyor to verify the effectiveness of the coating and to carry out an assessment of the conditions of internal structures which may include spot removal of the coating. When safe access cannot be provided, the soft or semi-hard coating is to be removed.
- 1.7.6 Prior to entering an enclosed space, it is to be verified by a competent person using a calibrated multi-gas meter that the atmosphere in that space is free from hazardous gas and contains sufficient oxygen.
- 1.7.7 Emergency equipment and personnel are to be available in case of an emergency or rescue operation.
- 1.7.8 Information on procedures, equipment operating instructions and safety checklists is to be available.
- 1.7.9 During the survey, ventilation is to be ensured and periodic testing is to be carried out as necessary to verify that the atmosphere remains safe for access.

### ■ Section 2

### Annual Surveys – Hull and machinery requirements

### 2.1 General

2.1.3 For vessels assigned the **Laid-up** notation 'laid-up', in lieu of the normal Annual Survey requirements a general examination of the hull and machinery is to be carried out.

### ■ Section 4

### Docking Surveys and In-water Surveys – Hull and machinery requirements

### 4.3 In-water Surveys

4.3.8 Where a vessel has an \*IWS notation, the condition of the high resistant resistance paint is to be confirmed at each drydocking in order that the \*IWS notation can be maintained.

### ■ Section 5

### Special Survey - General - Hull requirements

### 5.1 General

5.1.4 For vessels assigned the **Laid-up** notation 'laid-up', an Underwater Examination (UWE) and general examination of hull and machinery is to be carried out in lieu of the normal Special Survey requirements.

### Section 6

### Special Survey - Thickness measurement requirements for steel craft

#### 6.1 General

6.1.3 Thickness measurements are normally to be taken by means of ultrasonic test equipment and are to be carried out by a firm qualified as Grade 1 or Grade 2 according to LR approved in accordance with LR's Approval for Thickness Measurement of Hull Structures or by the Surveyor.

### ■ Section 7

### Machinery surveys – General requirements

### 7.1 Annual, Intermediate and Docking Surveys

7.1.3 For vessels assigned the **Laid-up** notation 'laid-up', a general examination of the machinery is to be carried out in lieu of the normal Annual Survey/Intermediate Survey requirements.

### **Periodical Survey Regulations for Yachts**

#### Effective date 1 July 2015

### ■ Section 1

### General

### 1.1 Frequency of surveys

- 1.1.1 The requirements of this Chapter are applicable to the Periodical Surveys set out in Ch 2,4.5. Except as amended at the discretion of the Committee, the periods between such surveys are as follows:
- (a) Annual Surveys if required, see Ch 2,4.5.2.
- (ab) Intermediate Surveys as required by Ch 2,4.5.5.
- (bc) Docking Surveys as required by Ch 2,4.5.6 and 4.5.7.
- (ed) Special Surveys at five-yearly intervals, see Ch 2,4.5.11. For alternative arrangements, see also Ch 2,4.5.12, 4.5.13 and 4.5.15.
- (de) Complete Surveys of machinery at five-yearly intervals, see Ch 2,4.5.16. For alternative arrangements, see also Ch 2,4.5.17, 4.5.19, 4.5.21, 4.5.22 and 4.5.23.
- 1.1.2 For yachts assigned the **Laid-up** notation, in order to maintain the vessel in class a general examination of the hull and machinery is to be carried out in lieu of the normal Intermediate Survey requirements and in addition an Underwater Examination (UWE) is to be carried out in lieu of the normal Special Survey requirements, see 2.1.2, 4.1.5 and 6.1.3.

Existing paragraphs 1.1.2 and 1.1.3 have been renumbered 1.1.3 and 1.1.4.

### ■ Section 2

### Intermediate Surveys - Hull and machinery requirements

#### 2.1 General

2.1.2 For yachts assigned the Laid-up notation, in lieu of the normal Intermediate Survey requirements a general examination of the hull and machinery is to be carried out.

### ■ Section 3

### Docking Surveys and In-water Surveys – Hull and machinery requirements

### 3.3 In-water Surveys

3.3.8 Where a yacht has an \*IWS notation, the condition of the high resistant resistance paint is to be confirmed at each drydocking in order that the \*IWS notation can be maintained.

### ■ Section 4

### Special Survey - General - Hull requirements

#### 4.1 General

4.1.5 For yachts assigned the **Laid-up** notation, an Underwater Examination (UWE) and general examination of hull and machinery is to be carried out in lieu of the normal Special Survey requirements.

### Section 6

### Machinery surveys - General requirements

### 6.1 Intermediate and Docking Surveys

6.1.3 For yachts assigned the **Laid-up** notation, a general examination of the machinery is to be carried out in lieu of the normal Intermediate Survey requirements.

### Part 3, Chapter 1

### **General Regulations**

### Effective date 1 July 2015

### Section 5

### Information required

### 5.2 Submission of plans and data

(Part only shown)

5.2.2 Where an \*IWS (In-water Survey) notation is to be assigned, see Pt 1, Ch 2,3.8.2, plans and information covering the following items are to be submitted:

• Details of high resistant resistance paint, for information only.

## ■ Section 6 Definitions

### 6.2 Principal particulars

6.2.4 **Length everall of the hull**,  $\pm_{\text{OA}}$   $L_{\text{H}}$ , is the distance, in metres, measured parallel to the static load waterline from the fereside foremost part of the stem to the after side aftermost part of the stern or transom, including all structural and integral parts of the craft, such as wooden, plastic or metal stems or sterns, bulwarks and hull/deck joints and excluding removable parts that can be detached in a non-destructive manner and without affecting the structural integrity of the craft, e.g. spars, bowsprits, pulpits at either end of the craft, stemhead fittings, rudders, outdrives, outboard motors and their mounting brackets and plates, diving platforms, boarding platforms, rubbing strakes, fenders and other projections. Detachable parts of the hull acting as hydrostatic or dynamic support to the craft when at rest or underway are not excluded. In case of multi-hull craft, the length of each hull shall be measured individually and  $L_{\text{H}}$  shall be taken as the longest of the individual measurements.

### ■ Section 7

### Inspection, workmanship and testing procedures

### 7.3 Testing procedures

### Table 1.7.1 Testing requirements

(Part only shown)

Item to be tested	Testing procedure	Testing requirement
Chain locker	Structural	The greater of: • head of water up to the top of the spurling pipe • head of water up to the exposed weather deck <sup>(9)</sup>

### **NOTES**

9. As an alternative for yachts with chain locker fitted forward of the collision bulkhead, structural plan verification and leak testing may be acceptable in lieu of hydro test.

### **Craft Design**

### Effective date 1 July 2015

■ Section 4

### **Bulkhead arrangements**

#### 4.10 Means of escape

4.10.1 For the requirements for means of escape on service craft and yachts ever 24 m in length, see Pt 17, Ch 2 and Pt 17, Ch 3 respectively.

### Part 3, Chapter 3

### **Control Systems**

### Effective date 1 July 2015

Section 2

**Rudders** 

### 2.25 Corrosion protection

2.25.1 All metalwork, is to be suitably protected against corrosion. This may be by coating or, where applicable, by a system of cathodic protection, see Chapter 15 of the Rules for Materials.

### Section 3

### Sternframes and appendages

### 3.5 Shaft brackets

- 3.5.6 For shaft brackets having hollow section arms, the cross-sectional areas at the root and the boss should not be not less than that required for a solid arm which satisfies the Rule section modulus having the proportions stated in 3.5.1. Hollow sections are to have a continuous central main piece connecting the shells at or near the location of greatest width, alternative arrangements will be specially considered.
- 3.5.9 The design of the shaft brackets with regard to hydrodynamic effects causing vibrational excitations as well as disturbance of the hydrodynamic flow into the propeller and rudders is outwith outside the scope of classification. However, it is recommended that the effects of periodic excitation caused by vortex shedding or other sources be carefully examined in order to prevent excessive structural vibration. The responsibility for such investigation rests with the designer.

### **Closing Arrangements and Outfit**

### Effective date 1 July 2015

### Section 4

### Side and stern doors and other shell openings

#### 4.1 General

- 4.1.4 In general, and for passenger craft in particular, the lower edge of door openings are not to be below a line drawn parallel to the freeboard deck at side, which is at its lowest point at least 230 mm above the upper edge of the uppermost Load Line.
- 4.1.8 Where doors and platforms are fitted in the shell, the structural and watertight integrity of the hull is to be maintained. Such doors and platforms are not to lead directly into the craft and an internal watertight compartment is to be provided in way of the shell openings. The doors and platforms are to be arranged to open outwards. The sill height of the access hull opening is not to be less than 300 mm above the waterline upper edge of the uppermost Load Line and the sill height of the internal access is to be not less than 300 mm higher than the hull sill. Alternative arrangements will be specially considered.

### 4.5 Closing, securing and supporting of doors

4.5.5 The spacing for cleats or closing devices is not to exceed 2,5 m and cleats or closing devices are to be positioned as close to the corners as practicable. Alternative arrangements for ensuring weathertight sealing will be specially considered. Where special consideration is made, the maximum deflection of the door edge between the cleats under the pressure loading (internal/external for outside/inside opening doors respectively) is to be limited to 1/1000 of the cleats distance, applying the load specified in 4.5.11 acting to push the door open.

### 4.8 Operating and Maintenance Manual

- 4.8.1 An Operating and Maintenance Manual for the doors is to be provided on board and is to contain necessary information on:
- (a) main particulars and design drawings;
- (b) service conditions (e.g. service area restrictions, acceptable clearances for supports);
- (c) maintenance and function testing;
- (d) register of inspections and repairs.

This Manual is to be submitted for approval to LR for review, and is to contain a note recommending that recorded inspections of the door supporting and securing devices be carried out by the craft's staff at monthly intervals or following incidents that could result in damage, including heavy weather or contact in the region of the doors. Any damages recorded during such inspections are to be reported to LR.

### ■ Section 7

### Portlights, windows and viewing ports, skylights and glass walls

#### 7.1 General

- 7.1.6 Where consideration is given to the use of glazing materials other than thermally toughened glass, the thickness and arrangements are to take account of any different material properties and be approved are to be individually approved and tested as appropriate or be in accordance with LR's Type Approval Procedure.
- 7.1.7 The acceptance of 'glued-in' glazing material, when proposed, will be subject to Type Approval or individual approval and tests as appropriate.

Existing paragraphs 7.1.8 to 7.1.11 have been renumbered 7.1.7 to 7.1.10.

#### 7.5 Windows

7.5.3 A hydrostatic test is to be carried out in order to examine watertightness of windows fitted in the side shell. A design pressure *p*, where *p* is given in 7.8.1, is to be applied to the external face of the window and maintained for at least 15 minutes.

7.5.4 A hydrostatic structural test is to be carried out in order to examine the capability of the frame, and glass glazing retaining arrangements. A design pressure 4p, where p is given in 7.8.1, is to be applied to the external face of the window. Alternatively, this test may be carried out using a steel plate in place of the glass glazing. Ideally the steel plate should be of a suitable reduced thickness to simulate the flexural performance of the glass glazing.

### 7.14 Skylights

7.14.1 Skylights, where fitted, are to be of substantial construction and securely attached to their coamings. The height of the lower edge of opening is to be as required by 5.2.1. The scantlings of the coaming are to be as required by 5.3.2. The thickness of glasses glazing in fixed or opening skylights is to be appropriate to their its size and position as required for portlights or windows. Glasses Glazing in any position are is to be protected from mechanical damage, and where fitted in Positions 1 or 2 (as defined in Ch 1,6.10) are is to be provided with robust deadlights or storm covers permanently attached.

### Part 4, Chapter 1

### **General Regulations**

Effective date 1 July 2015

- Section 1
  Introduction
- 1.1 General
- 1.1.4 Where a Load Line is to be assigned the yacht is to comply with the appropriate requirements of the National Authority or, in the absence of these, in accordance with the requirements of Chapter 2, Sections 1 to 6 and Pt 1, Ch 2,1.1.
- 1.1.6 Yachts ever 24 m overall length,  $L_{\rm OA}$  (as defined in Pt 3, Ch 1,6.2.4), may be the subject of National or International regulations concerning construction, safety and manning and compliance with these regulations is the responsibility of the Owners and Builders. Lloyd's Register is able to advise on such matters and to issue applicable certificates where so authorised by the National Authority with which the yacht is registered.

# Part 4, Chapter 2 All Yachts

Effective date 1 July 2015

- Section 1
  General
- 1.1 Plans and data
- 1.1.3 Unless otherwise specified, the requirements in this Chapter are based on yachts in Service Group 6 as defined in Pt 1, Ch 2, 3.5.5. Where yachts have a service restriction, the requirements will be specially considered.

### ■ Section 4

### Bathing and watersport platforms and shell openings

#### 4.1 General

4.1.2 Shell openings with a sill height below, or less than 600 mm above, the design waterline are to be of equivalent structural integrity to the surrounding hull structure. Doors from this space providing internal access are to have a sill height at least 600 mm above the design waterline. The effect of flooding on stability and operational controls, and limitations on when and where opening may be used, are to be considered.

#### Section 6

### Protection of openings

#### 6.3 Hatches (coamings and covers)

6.3.5 Flush hatches that are not closed by gasketed covers and secured by close space closely spaced bolts will be specially considered but should not, in general, be fitted on the weather deck. However, flush hatches fitted with double gasketed covers with drains led overboard that do not require to be opened at sea and that are in protection locations, will be considered. Flush hatches are to be watertight and satisfactorily prototype tested at design head. Flush hatches are to be kept closed at sea. A spare gasket is to be provided on board.

#### 6.5 Portlights, and windows and skylights

6.5.1 Special arrangements in accordance with a relevant National or International Standard may be accepted in lieu of arrangements in accordance with the requirements of this Section.

6.5.1 6.5.2 The requirements for side scuttles and portlights, windows and skylights are indicated in Pt 3, Ch 4. Proposals to fit windows below freeboard deck will be specially considered.

Existing paragraphs 6.5.2 and 6.5.3 have been renumbered 6.5.3 and 6.5.4.

6.5.4 6.5.5 Chemically toughened glass may be used in lieu of thermally toughened glass for portlights and windows provided it can be demonstrated the strength of the arrangement is at least equivalent in strength to that of thermally toughened glass. The glazing system is to be of laminated construction and the method of testing will be specially considered. The minimum case depth of chemical strengthening is to be 30 microns.

Existing paragraphs 6.5.5 and 6.5.6 have been renumbered 6.5.6 and 6.5.7.

6.5.7 6.5.8 Storm covers or deadlights are required for all windows and portlights fitted in the front and sides of the deckhouses on the weather deck and also the sides, except where these and for front windows fitted on the second tier. Where storm covers are interchangeable port and starboard; in this case, a sufficient number to fit any one side are is to be provided. Additionally a storm cover or deadlight is to be provided for each different size of window or portlight respectively.

Existing paragraph 6.5.8 has been renumbered 6.5.9.

### 6.6 Sliding glass doors or glass walls

6.6.1 Special arrangements in accordance with a relevant National or International Standard may be accepted in lieu of arrangements in accordance with the requirements of this Section.

Existing paragraphs 6.6.1 to 6.6.4 have been renumbered 6.6.2 to 6.6.5.

### ■ Section 7

### **Corrosion protection**

#### 7.1 General

7.1.1 Corrosion prevention and coatings requirements are to be in accordance with Chapter 15 of the Rules for Materials.

- 7.1.1 7.1.2 The design of the structure and methods of attachment of fittings are to take into consideration procedures to minimise corrosion of metal structures and fittings due to electro-chemical action. All exposed steel and aluminium alloy surfaces are to be protected by the application of a suitable paint and anti-fouling system and the fitting of a cathodic or impressed current cathodic protection (ICCP) system.
- 7.1.2 7.1.3 Sacrificial anodes are to be mounted equidistant between metals being protected, and their location and attachment is to be such as to obviate hard spots minimise the effects of welding on the hull materials.

Existing paragraphs 7.1.3 and 7.1.4 have been renumbered 7.1.4 and 7.1.5.

7.1.5 7.1.6 Yachts fitted with a negatively grounded electrical system or fitted with a negatively grounded independent battery system may use the impressed current cathodic protection (ICCP) scheme system.

### 7.4 Protective coating systems in dedicated seawater ballast tanks – ShipRight Notations ACS(B)

- 7.4.1 For ships that are required to comply with IMO Resolution MSC.215(82), *Performance Standards for Protective Coatings (PSPC)*, all dedicated seawater ballast tanks are to have approved coating systems applied in accordance with LR's ShipRight Procedure *Anti-Corrosion System Notation*.
- 7.4.2 **ShipRight ACS(B)** will be entered in Column 4 of the *Register Book* to indicate that the seawater ballast tanks are coated with approved coating systems in accordance with IMO Resolution MSC.215(82), *Performance Standards for Protective Coatings*.

### Part 4, Chapter 3

### **Special Considerations for Sailing Yachts**

### Effective date 1 July 2015

■ Section 1

### Hull design and construction parameters

#### 1.1 Plans and data

- 1.1.1 In addition to the general plans and data required by Pt 3, Ch 1,5 the following details of additional structural components, particular to sailing yachts, are to be submitted for appraisal:
- Sail plan.
- Mast loadings.
- Bowsprit loadings.
- Rigging loadings.
- Mast step.
- Maximum working loads on masts.
- Mast partners.
- Ballast keel lines plan.
- Ballast keel securing arrangements.
- Rudder skeg construction and support details.
- Chainplates.
- Through deck fittings.

### ■ Section 3

### Chain plates

#### 3.2 Calculations

(Part only shown)

3.2.1 The strength of any part of chainplates or structure to which it is attached is not to be less than the breaking load of the rigging to which it is attached or 2,5 times the maximum working load of the rigging, whichever is the lesser and to that load subject to the following factors of safety (FOS).

### General

### Effective date 1 July 2015

■ Section 1

Rule application

#### 1.1 General

1.1.4 Craft built and classed in accordance with the Rules, operating in non-displacement mode, see 1.1.7, will, in general, be assigned an operational envelope. This will be based on the allowable speeds, significant wave heights and corresponding displacements. It will form an appendix to the Classification Certificate and is to be incorporated in the craft's Operational Manual. The assigned operational envelope is to be clearly displayed in the wheelhouse. Installation of an accelerometer at LCG connected via a visual display in the wheelhouse may be required.

### Part 6, Chapter 2

### **Construction Procedures**

### Effective date 1 July 2015

■ Section 2

**Materials** 

### 2.4 Mechanical properties for design

2.4.3 The requirements for global strength considerations in craft incorporating higher tensile steel materials are to be based on a material efficiency higher tensile steel concentration factor,  $\eta_{HTS}$ , as given in Table 2.2.1.

Table 2.2.1 Values of Higher tensile steel concentration factor  $\eta_{HTS}$ 

Specified minimum yield stress in N/mm <sup>2</sup>	ባ <sub>НТ</sub> S
235 265 315 340 355 <del>390</del>	1,000 0,964 0,956 0,934 0,919 <del>0,886</del>
NOTE Intermediate values may be obtained by linear interpolation.	

2.4.5 For the application of the requirements of 2.4.3 and 2.4.4 special consideration will be given to steel where  $\sigma_s \ge 390$  355 N/mm<sup>2</sup>. Where such steel grades are used in areas which are subject to fatigue loading the structural details are to be verified using fatigue design assessment methods.

### 2.5 Corrosion protection

2.5.1 Corrosion prevention requirements are to be in accordance with Chapter 15 of the Rules for Materials.

Existing paragraphs 2.5.1 and 2.5.2 have been renumbered 2.5.2 and 2.5.3.

2.5.3 2.5.4 Where an impressed current cathodic protection system is fitted, plans showing the proposed layout of anodes and hull penetrations are to be submitted. Where a cathodic protection system is fitted, plans showing the proposed layout of anodes and hull penetrations are submitted in accordance with Chapter 15 of the Rules for Materials.

### 2.6 Paints and coatings

- 2.6.1 The hull is to be protected against corrosion by a suitable protective coating. All coatings are to be in accordance with the requirements of this Section.
- 2.6.2 Where a primer is used to coat steel after surface preparation and prior to fabrication, the composition of the coating is to be such that it will have no significant deleterious effect on subsequent welding work and that it is compatible with the paints or other coatings subsequently applied in association with an approved system of corrosion control. Prefabrication primers are to be approved in accordance with Chapter 15 of the Rules for Materials.
- 2.6.3 Paints or other coatings are to be suitable for the intended purpose in the locations where they are to be used, and where appropriate, approved in accordance with Chapter 15 of the Rules for Materials. Coatings are to be of adequate film thickness, applied in accordance with the paint manufacturer's specification.
- 2.6.6 Protective coatings are generally to be hard coatings. Other coating systems (e.g. soft coatings) may be considered as alternatives provided they are applied and maintained in compliance with the manufacturer's specification.
- 2.6.7 The paint or coating is to be compatible with any previously applied primer, see 2.6.

#### 2.9 External immersed areas

2.9.1 For the deferment of dry-docking dry-docking or where an **IWS** (In-water Survey) notation is to be assigned protection of the underwater portion of the hull is to be provided by means of a suitable high resistant resistance paint applied in accordance with the manufacturer's requirements. Details of the high resistant resistance paint are to be submitted for information.

### 2.10 External cathodic protection

2.10.1 Where an impressed current cathodic protection (ICCP) system is fitted, plans showing the proposed layout of anodes, reference cells, wiring diagram and the means of bonding-in of the rudder and propeller, are to be submitted. ICCP requirements are to be in accordance with Chapter 15 of the Rules for Materials.

#### 2.11 Protection of ballast spaces

2.11.1 Cathodic protection may be used in association with coatings for the protection of ballast spaces, see Chapter 15 of the Rules for Materials.

### 2.13 Corrosion margin

2.13.2 Where steel is not protected against corrosion, by painting or other approved means, the scantlings may require to be further considered further consideration of the scantlings is required.

### ■ Section 3

### Procedures for welded construction

#### 3.1 General

3.1.1 All Except as otherwise indicated below, all welded construction is to be conducted in accordance with the requirements specified in Chapter 13 of the Rules for Materials.

#### 3.3 Defined practices and welding sequence

3.3.1 Rudder, sterntubes, propeller brackets and jet units. The final boring out of propeller brackets and sterntubes and the fit-up and alignment of rudder bearings and jet units are to be carried out after the major part of the welding of the aft end of the craft is complete. The contacts between rudder stocks and propeller shafts with bearings are to be checked before the final mounting.

### 3.5 Inspection and non-destructive examination

### 3.6 Acceptance criteria

3.6.2 The acceptance criteria are to be in accordance with Chapter 13, 2 of the Rules for Materials.

### Part 6, Chapter 3

### **Scantling Determination for Mono-Hull Craft**

### Effective date 1 July 2015

### ■ Section 1

### General

### 1.5 Symbols and definitions

(Part only shown)

1.5.1 The symbols used in this Chapter are defined below and in the appropriate Section:

k<sub>s</sub> = higher tensile steel factor, as defined in Ch 2,2.4

=  $235/\sigma_s$ , see also Ch 2,2.4

 $\sigma_s$  = guaranteed specified minimum yield strength of the material, in N/mm<sup>2</sup>

$$\tau_s = \frac{\sigma_s}{\sqrt{3}}$$

### 1.16 Plating general

(Part only shown)

1.16.1 The requirements for the thickness of plating,  $t_p$ , is, in general, to be in accordance with the following:

$$t_p = \frac{22,4s\gamma\beta\sqrt{p}}{\sqrt{f_{\sigma}\sigma_s}} \times 10^{-3} \text{ mm}$$

$$t_{\rm p} = 22.4 \, {\rm s} \, \gamma \, \beta \sqrt{\frac{p \, k_{\rm S}}{f_{\rm \sigma} \, 235}} \, {\rm x} \, 10^{-3} \, {\rm mm}$$

s,  $\gamma$ ,  $\beta$ ,  $\rho$ ,  $\sigma_s$  are as defined in 1.5.1.

 $k_{\rm s}$  is as defined in Chapter 2, 2.4.

### 1.17 Stiffening general

(Part only shown)

1.17.1 The requirements for section modulus, inertia and web area of stiffening members are, in general, to be in accordance with the following:

(a) Section modulus:

$$Z = \Phi_Z \frac{p s l_e^2}{f_{\sigma} \sigma_s} cm^3$$

$$Z = \Phi_Z \frac{p s I_e^2 k_s}{f_\sigma 235} \text{ cm}^3$$

(c) Web area:

$$A_{\rm W} = \Phi_{\rm A} \frac{p \, s \, I_{\rm e}}{100 \, f_{\rm \tau} \tau_{\rm S}} \, {\rm cm}^2$$

$$A_{\rm W} = \Phi_A \frac{p \, {\rm s} \, I_{\rm e} \, k_{\rm s}}{100 \, f_{\rm t} \left(\frac{235}{\sqrt{3}}\right)} \, {\rm cm}^2$$

where

p,  $s_{\overline{\tau}}$  and  $l_{e}$ , and  $\tau_{s}$  are as defined in 1.5.1.

 $k_{\rm S}$  is as defined in Chapter 2,2.4.

### ■ Section 2

### Minimum thickness requirements

### 2.1 General

### Table 3.2.1 Minimum thickness requirements

(Part only shown)

### Symbols

 $\omega$  = service type correction factor as determined from Table 3.2.2

 $k_{\text{ms}} = 635/(\sigma_{\text{s}} + \sigma_{\text{u}})$ 

 $\sigma_s$  = specified minimum yield strength of the material, in N/mm<sup>2</sup>

 $\sigma_u$  = specified minimum ultimate tensile strength of the material, in N/mm  $^2$ 

 $b_{\rm D}$  = minimum breadth of eross section cross-section of hollow rectangle pillar, in mm

 $d_p$  = outside diameter of tubular pillar, in mm

 $L_R$  is and  $\sigma_s$  are as defined in 1.5.1.

### Part 6, Chapter 4

### **Scantling Determination for Multi-Hull Craft**

Effective date 1 July 2015

■ Section 1

General

### 1.5 Symbols and definitions

(Part only shown)

1.5.1 The symbols used in this Chapter are defined below and in the appropriate Section:

 $k_s$  = higher tensile steel factor, as defined in Ch 2,2.4

 $= 235/\sigma_s$ 

### ■ Section 2

### Minimum thickness requirements

#### 2.1 General

### Table 4.2.1 Minimum thickness requirements

(Part only shown)

#### Symbols

 $\omega$  = service type correction factor as determined from Table 3.2.2 in Chapter 3

 $k_{\text{ms}} = 635/(\sigma_{\text{s}} + \sigma_{\text{u}})$ 

 $\sigma_s$  = specified minimum yield strength of the material, in N/mm<sup>2</sup>

 $\sigma_u$  = specified minimum ultimate tensile strength of the material, in N/mm $^2$ 

 $b_p$  = minimum breadth of cross-section cross-section of hollow rectangle pillar, in mm

 $d_p$  = outside diameter of tubular pillar, in mm

 $L_R$  and  $\sigma_s$  are as defined in 1.5.1.

### Part 6, Chapter 5

### **Special Features**

### Effective date 1 July 2015

### ■ Section 1

### General

### 1.2 Symbols and definitions

(Part only shown)

2.1 The symbols and definitions used in this Chapter are defined below and in the appropriate Section:

s = secondary stiffener spacing, in mm

 $k_{\rm s}$  = higher tensile steel factor, as defined in Ch 2,2.4

 $= 235/\sigma_s$ 

### ■ Section 3

### Vehicle decks

### 3.3 Deck plating

(Part only shown)

3.3.1 The thickness,  $t_p$ , of vehicle deck plating is to be taken as not less than:

s = secondary stiffener spacing, in mm

s and  $k_s$  are as defined in 1.2.

### 3.4 Secondary stiffening

### Table 5.3.3 Secondary stiffener requirements

(Part only shown)

Scantling requirement	Load case	
	<i>d</i> ≤ I	d > I
Section modulus (Z) (cm <sup>3</sup> )	$Z = \left(\frac{P k_{W} \left(3I^2 - d^2\right)}{24I f_{\sigma} \sigma_{S}}\right) \times 10^3 + Z_{dk}$	$Z = \frac{\left(k_{\text{W}} P I^2\right)}{10d f_{\text{G}} \sigma_{\text{S}}} \times 10^3 + Z_{\text{dk}}$
	$Z = \left(\frac{P k_{W} \left(3I^{2} - d^{2}\right) k_{S}}{24I f_{\sigma} 235}\right) \times 10^{3} + Z_{dk}$	$Z = \left(\frac{k_{\rm W} P I^2 k_{\rm S}}{10d f_{\rm G} 235}\right) \times 10^3 + Z_{\rm dk}$

Symbols

 $k_s$  = higher tensile steel factor, as defined in Ch 2,2.4

 $\sigma_s$  = specified minimum yield strength of the material, in N/mm<sup>2</sup>

 $\tau_s$  = shear stress of material, in N/mm<sup>2</sup>

 $=\frac{\sigma_s}{\sqrt{3}}$ , where  $\sigma_s$  is as defined in 1.2

### ■ Section 4

### **Bow doors**

### 4.3 Symbols and definitions

(Part only shown)

4.3.1 The symbols used in this Section are defined as follows:

K<sub>s</sub> = higher tensile steel factor

 $= 235/\sigma_s$ 

 $\tau$  = shear stress, in N/mm<sup>2</sup>.

### 4.4 Strength criteria

- 4.4.1 Scantlings of the primary members, securing and supporting devices of bow doors and inner doors are to be able to withstand the design loads defined in 4.5. The shear, bending and equivalent stresses are not to exceed  $80/k_s$  N/mm<sup>2</sup>,  $120/k_s$  N/mm<sup>2</sup> and  $150/k_s$  N/mm<sup>2</sup> respectively where  $k_s$  is as defined in 1.2.
- 4.4.4 The arrangement of securing and supporting devices is to be such that threaded bolts do not carry support forces. The maximum tension in way of threads of steel bolts not carrying support forces is not to exceed 125/ $k_s$  N/mm<sup>2</sup> where  $k_s$  is as defined in 1.2.

s = secondary stiffener spacing, in metres

### **Hull Girder Strength**

### Effective date 1 July 2015

■ Section 1

General

#### 1.2 Symbols and definitions

(Part only shown)

1.2.1 The symbols and definitions applicable to this Chapter are defined below or in the appropriate sub-Section.

$$\tau_s = \frac{\sigma_s}{\sqrt{3}}$$

 $\tau_s$  = shear stress of material, in N/mm<sup>2</sup>

$$= \frac{\sigma_s}{\sqrt{3}}$$

### Part 7, Chapter 2

### **Construction Procedures**

### Effective date 1 July 2015

■ Section 2

**Materials** 

### 2.5 Cathodic protection

2.5.2 Where an impressed current cathodic protection system is fitted, plans showing the proposed layout of anodes and hull penetrations are to be submitted. Where a cathodic protection system is fitted, plans showing the proposed layout of anodes and hull penetrations are to be submitted in accordance with Chapter 15 of the Rules for Materials.

### 2.6 Paints and coatings

- 2.6.1 The hull, deck, deckhouse and superstructure and other structure which is exposed to the marine environment is to be protected against corrosion by a suitable protective coating, see Ch 15 of the Rules for Materials. All coatings are to be in accordance with the requirements of this Section. Internal structures need not in general be coated provided that they are built of aluminium alloy grades shown in Chapter 8 of the Rules for Materials.
- 2.6.3 Paints or other coatings are to be suitable for the intended purpose in the locations where they are to be used. Coatings are to be of adequate film thickness, applied in accordance with the paint manufacturer's specification. The paint or coating is to be compatible with any previously applied primer.

Existing paragraph 2.6.4 has been renumbered 2.6.3.

2.6.5 Paints, varnishes and similar preparations having a nitro-cellulose or other highly flammable base are not to be used in accommodation or machinery spaces.

### Section 3

### Procedures for welded construction

#### 3.1 General

3.1.2 The requirements of this Section are applicable to aluminium alloys welded using the metal inert gas (MIG) or tungsten inert gas (TIG) processes. Where it is proposed to use alternative welding processes, details are to be submitted for approval, prior to the start of fabrication. Cast aluminium alloys are not in general to be welded directly to wrought high magnesium alloys unless the welding is carried out in accordance with an agreed procedure.

#### 3.3 Welding consumables

- 3.3.1 All welding consumables are to be approved by LR and are to be suitable for the type of joint and grade of material, see Ch 11.9 of the Rules for Materials.
- 3.3.2 The 5083 and 5086 alloys are normally welded using the 5356, 5556 or 5183 consumables and the 6061 and 6082 alloys are normally welded using the 4043 consumables.
- 3.3.3 Only approved filler wires are to be used. Testing requirements for welding consumables are contained in the Rules for Materials.
- 3.3.4 Cast aluminium alloys are not in general to be welded directly to wrought high magnesium alloys unless the welding is carried out in accordance with an agreed procedure.
- 3.3.5 Special care is to be taken in the distribution, storage and handling of all welding consumables. Aluminium filler metals are to be kept in a heated dry storage area with a relatively uniform temperature. Condensation on the metal surface during storage and use is to be avoided. Other welding consumables such as bare wire and welding studs are to be stored under dry conditions to prevent corrosion. Effective facilities for protecting consumables are to be provided close to working areas.

### 3.4 3.3 Defined practices and welding sequence

- 3.4.1 Details of the welding procedures and the sequence of welding assemblies and joining up of assemblies are to be submitted.
- 3.4.2 The proposed sequence of welding is to be agreed with the Surveyor prior to construction.
- 3.4.3 The type and disposition of connections and sequences of welding are to be so planned that any restraint during welding operations is reduced to a minimum.
- 3.4.4 Special attention is to be given to the examination of plating in way of all lifting eye plate positions to ensure freedom from cracks. This examination is not restricted to the positions where eye plates have been removed but includes the positions where lifting eye plates are permanent fixtures.
- 3.4.5 Careful consideration is to be given to assembly sequence and overall shrinkage of plate panels, assemblies, etc., resulting from welding processes employed. Welding is to proceed systematically with each welded joint being completed in correct sequence without undue interruption. Where practicable, welding is to commence at the centre of a joint and proceed outwards or at the centre of an assembly and progress outwards towards the perimeter so that each part has freedom to move in one or more directions. Generally, the welding of stiffener members including transverses, frames, girders, etc., to welded plate panels by automatic processes is to be carried out in such a way as to minimise angular distortion of the stiffener.
- 3.4.6 Butt welds are to be finished full at the ends and cut back before welding the seams. Seams are generally not to be welded within 300 mm of an unwelded butt weld or welded across an unwelded butt joint.
- 3.4.7 3.3.1 The final boring out of propeller brackets and sterntubes and the fit-up and alignment of rudder bearings and jet units are to be carried out after the major part of the welding of the aft end of the craft is complete. The contacts between rudder stocks and propeller shafts with bearings are to be checked before the final mounting.
- 3.4.8 Precautions are to be taken to screen and pre-warm the general and local weld areas as necessary. Surfaces are to be dry.

### 3.5 3.4 Structural arrangements and access

Existing paragraphs 3.5.1 and 3.5.2 have been renumbered 3.4.1 and 3.4.2.

#### 3.6 3.5 Heat treatment

3.6.1 Pre-heating is to be applied in accordance with the requirements specified in Chapter 13 of the Rules for Materials.

Existing paragraphs 3.6.2 and 3.6.3 have been renumbered 3.5.1 and 3.5.2.

### 3.7 3.6 Testing Inspection and non-destructive examination

Existing paragraphs 3.7.1 to 3.7.3 have been renumbered 3.6.1 to 3.6.3.

### 3.8 3.7 Acceptance criteria

Existing paragraphs 3.8.1 is to be renumbered 3.7.1.

- 3.8.2 3.7.2 The quality and workmanship of welding of all fittings and attachments to main structure, both permanent and temporary, are to be equivalent to those of the main hull structure. The acceptance criteria are to be in accordance with Chapter 13,8 of the Rules for Materials.
- 3.8.3 Visual examination of all welds is to be supplemented by non-destructive testing as considered necessary by the Surveyor.
- 3.8.4 Fairing, by linear or spot heating, to correct distortions due to welding is, in general, not to be carried out unless procedures have been approved to ensure that the properties of the material are not adversely affected. Visual examination of all heat affected areas and welds in the vicinity is to be carried out to ensure freedom from defects.

### Part 15, Chapter 4

### **Pressure Plant**

Effective date 1 July 2015

### ■ Section 2

### Cylindrical shells subject to internal pressure

### 2.1 Minimum thickness

2.1.4 The minimum thickness of vessels manufactured of corresion resistant steels with improved corrosion resistance properties will be the subject of special consideration.

### Fire Protection, Detection and Extinction - General

### Effective date 1 July 2015

■ Section 1

### **General requirements**

#### 1.1 Application

- 1.1.1 The requirements of this Part apply to yachts with an overall length,  $L_{\rm OA}$  (as defined in Pt 3, Ch 1,6.2.4) of 24 m or greater, 3000 gross registered tonnage or less, and intended for the carriage of 12 passengers or less, with a load line length greater than 24m or carrying more than 12 passengers and service craft (see also 1.1.2(c)) built in accordance with these Rules.
- 1.1.2 Consideration will be given to the acceptance of fire safety measures:
- (a) which, for Service Craft yachts, have been prescribed and approved by the Government of the Flag State, provided that these are shown to be equivalent to those required by the MCA LY3 Code as amended. In this instance, the requirements of Chapter 2 and Chapter 4 of these Rules are not applicable;
- (b) which, for yachts, intended for the carriage of more than 12 passengers but not more than 36 passengers, have been prescribed and approved by the Government of the Flag State, provided that these are shown to be equivalent to those required by SOLAS for passenger ships carrying not more than 36 passengers. In this instance, the requirements of Chapter 3 and Chapter 4 of these Rules are not applicable;
- (c) which, for yachts, intended for the carriage of more than 36 passengers, have been prescribed and approved by the Government of the Flag State, provided that these are shown to be equivalent to those required by SOLAS for passenger ships carrying more than 36 passengers. In this instance, the requirements of Chapter 3 and Chapter 4 of these Rules are not applicable:
- (bd) which, for yachts, have been prescribed and approved by the Government of the Flag State, provided these are shown to be equivalent to those required by the MCA LY2 Code as amended. In this instance, the requirements of Chapter 3 and Chapter 4 of these Rules are not applicable;
- (ee) where the arrangements are considered equivalent to those required by these Rules as a result of risk assessment studies; or
- (ef) where the arrangements are considered acceptable compared to those required by these Rules, due cognisance having been taken of any restricted service limits.

### 1.2 Submission of plans and information

1.2.5 For yachts, where fire plans and the information listed above have been appraised, approved and verified on board by the Flag Administration in compliance with the MCA LY23 Code as amended, Lloyd's Register will only acknowledge the aforementioned and therefore no further appraisal, approval or survey should be provided.

### Part 17, Chapter 3

### Fire Protection, Detection and Extinction — Yachts

### Effective date 1 July 2015

■ Section 3

### Fire safety measures for yachts 500 gt or more

### 3.16 Ventilation systems

- 3.16.1 Ventilation ducts are to be of non-combustible material steel or another non-combustible material subject to the other material having passed a standard fire test in accordance with Annex 1: Part 3 of the FTP Code as a non-load bearing structure for 30 minutes following the requirements for testing 'B' class divisions. Short lengths of ducts not exceeding 2 m in length and with a cross-section not exceeding 0,02 m<sup>2</sup> need not be non-combustible, subject to these ducts being:
- (a) of a material that has low flame spread characteristics:
- (b) used at the end of the ventilation device; and
- (c) situated not less than 600 mm, measured along the duct, from an opening in an 'A' or 'B' Class division including continuous 'B' Class ceilings.

### **Cross-References**

Section numbering in brackets reflects any Section renumbering necessitated by any of the Notices that update the current version of the Rules for Special Service Craft.

### Part 1, Chapter 2

2.2.8	Reference to Part 1, Chapter 2, 2.2.11 now reads Volume 1, Part 1, Chapter 2, 2.2.12
3.4.2	Reference to Part 1, Chapter 2, 2.2.10 now reads Volume 1, Part 1, Chapter 2, 2.2.11
3.5.2	Reference to Part 1, Chapter 2, 2.2.20 now reads Volume 1, Part 1, Chapter 2, 2.2.21

Part 1, Chapter 3	
3.2.2	Reference to Part 1, Chapter 3, 1.5.6 now reads Part 1, Chapter 3, 1.5.7
3.2.5	Reference to Part 1, Chapter 3, 1.5.3 now reads Part 1, Chapter 3, 1.5.4
5.3.1	Reference to Part 1, Chapter 3, 1.5.3 now reads Part 1, Chapter 3, 1.5.4
5.4.2	Reference to Part 1, Chapter 3, 1.5.6 now reads Part 1, Chapter 3, 1.5.7
Table 3.5.1	Reference to Part 1, Chapter 3, 1.5.3 now reads Part 1, Chapter 3, 1.5.4
Table 3.6.1	Reference to Part 1, Chapter 3, 1.5.3 now reads Part 1, Chapter 3, 1.5.4
Table 3.6.1	Reference to Part 1, Chapter 3, 1.5.6 now reads Part 1, Chapter 3, 1.5.7

### Part 5, Chapter 1

1.1.7 Reference to Part 1, Chapter 2, 2.2.10 now reads Part 1, Chapter 2, 2.2.11

### Part 5, Chapter 3

1.1.3 Reference to Part 1, Chapter 2, 2.2.10 now reads Part 1, Chapter 2, 2.2.11

### Part 5, Chapter 5

2.1.1	Reference to Part 1, Chapter 2, 2.2.12 now reads Part 1, Chapter 2, 2.2.13
2.6.1	Reference to Part 1, Chapter 2, 2.2.12 now reads Part 1, Chapter 2, 2.2.13
3.1.1	Reference to Part 1, Chapter 2, 2.2.13 now reads Part 1, Chapter 2, 2.2.14
3.3.1	Reference to Part 1, Chapter 2, 2.2.13 now reads Part 1, Chapter 2, 2.2.14

### Part 6, Chapter 5

4.5.1 Reference to Part 1, Chapter 2, 2.2.10 now reads Part 1, Chapter 2, 2.2.11

### Part 7, Chapter 2

Reference to Part 7, Chapter 2, 3.7.3 now reads Table 2.3.1 Part 7, Chapter 2, 3.6.3

### Part 7, Chapter 3

1.30.1 Reference to Part 7, Chapter 2, 3.8 now reads Part 7, Chapter 2, 3.7

### Part 7, Chapter 5

Reference to Part 1, Chapter 2, 2.2.10 now reads 4.5.1 Part 1, Chapter 2, 2.2.11

### Part 17, Chapter 1

1.1.1 Reference to Part 17, Chapter 1, 1.1.2 (c) now reads Part 17, Chapter 1, 1.1.2 (e)

Updates to the current version of the Guidance Notes for Wind Farm Service Vessels.

### Chapter 2

6.5.1 Reference to Volume 1, Part 1, Chapter 2, 2.2.16 now reads Volume 1, Part 1, Chapter 2, 2.2.17

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